

Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{PG}{4\pi R^2}$$

Equipment LPV4-U2-300S
Manufacturer Buffalo Inc.

where: S = power density
P = power input to the antenna
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna

Total Power* density at prediction frequency: 15.607431 (mW/cm²)

Margin of Compliance: -11.93331412

Note: "Total Power" means added Values, both of Antenna A and Antenna B.

Detail is below:

(Antenna : A)

Maximum peak output power at antenna input terminal: 21.44 (dBm)

Maximum peak output power at antenna input terminal: 139.3156803 (mW)

Antenna gain(typical): 2 (dBi)

Maximum antenna gain: 1.584893192 (numeric)

Prediction distance: 20 (cm)

Prediction frequency: 2437 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 1 (mW/cm²)

Power density at prediction frequency: 0.043927 (mW/cm²)

Maximum allowable antenna gain: 15.57269855 (dBi)

(Antenna : B)

Maximum peak output power at antenna input terminal: 20.42 (dBm)

Maximum peak output power at antenna input terminal: 110.153931 (mW)

Antenna gain(typical): 2 (dBi)

Maximum antenna gain: 1.584893192 (numeric)

Prediction distance: 20 (cm)

Prediction frequency: 2437 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 1 (mW/cm²)

Power density at prediction frequency: 0.034732 (mW/cm²)

Maximum allowable antenna gain: 16.59269855 (dBi)